

NEW ANCISTROLEPIS FROM
THE BERING SEA (BUCCINIDAE)

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The genus *Ancistrolepis* was established by Dall in 1894 with *Chrysodomus eucosmius* Dall from Alaska designated the type species. Four species and two subspecies, namely *A. eucosmius* Dall, *A. e. bicinctus* Dall, *A. beringianus* Dall, *A. gemmatus* Dall, *A. g. yamazakii* Kuroda, and *A. hikitai* Kuroda, have been reported from the Northern Pacific. Recently we received a specimen from the Bering Sea which is very close to the type species in the general features. But it has a conically turritid shell with three prominent spiral cords equidistantly placed to each other and one subsutural cord just below the upper suture on the whorls, and four basal spiral cords in addition to them on the body whorl. It seems to be a new subspecies of *A. eucosmius* Dall.

We wish to express our sincere thanks to Mr. Seishiro Koyama who sent this specimen for our study.



Fig. 1. *Ancistrolepis eucosmius koyamai* Habe and Ito new subspecies. Holotype, 37.5 mm. in height.

Ancistrolepis eucosmius, koyamai, new subspecies (Fig. 1)

Description—Shell is rather small for the genus, white, solid, conically turreted, with six whorls excluding the eroded nucleus, covered with a thick olivaceous and densely lamellated periostracum. Each whorl has four spiral cords and minute spiral threads between them. The uppermost cord just below the suture is rather weakly formed. Below a rather wide space is a prominent cord on the shoulder; the other three cords are prominently and equidistantly-placed. The body whorl is as large as three fifths of the shell height and has eight spiral cords which are also prominent (excluding the subsutural cord) and are subequidistantly arranged on the base. The aperture is ovate with a wide, short siphonal canal, white within, internally bearing shallow grooves. The outer margin is roundly curved and waved at the edge by the ends of the spiral cords; columellar pillar short and callous and somewhat twisted near the end of the distinct fasciole.

Height 37.5 mm. and breadth 19.8 mm. (figured type specimen preserved in the National Science Museum, NSMT—MO. 38541).

Type locality—Bering Sea (more exact locality unknown).

Remarks—*Ancistrolepis fujitai* Kuroda and *A. kinoshitai* Kuroda have been removed to the genus *Parancistrolepis* Azuma because they have multicuspidate marginal teeth superficially very close to those of the genus *Fusinus* in the family Fasciolaridae. *A. trochoideus* Dall and *A. t. ovoideus* Habe and Ito are allocated to the subgenus *Bathyancistrolepis* Habe and Ito the nodule of which has three cusps on the marginal tooth, with the middle one minute in size.

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ENVIRONMENTAL CONTROL OF FORM
IN LAND SNAILS
A CASE OF UNUSUAL PRECISION

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We are removed nearly a century from the time when land snails first played devil's advocate to Darwinism. The advocate: *Achatinella*. Mephisto: none other than the Reverend Gulick (1873). The claim: geographic variation in form proceeds from isolation alone; it is spontaneous and unrelated to climate or habitat. Nonetheless, when conchologists marvel at the wondrous diversity of *Cerion*, *Liguus*, or *Partula* and doubt that it is either adaptive or even correlated with the variation of environments, they merely repeat Gulick's claim, though it has been disproved for his own material (Welch, 1938, 1942, 1958).

To this historic argument against selection that Gulick proposed and Crampton (1916, 1925, 1932) pursued, the modern evolutionist responds by recording correlations between form and environment. To be sure, not all such correlations refute the anti-selectionist thesis since many, especially in intraspecific situations, are produced directly and have no genetic basis. But even these purely phenotypic events can reinforce a selectionist interpretation because their direction may correspond to similar genetic events at higher systematic levels. Having recognized the phenotypic effect, we may be able to give an adaptive explanation for the genetic differences. In Bermudian land snails of the subgenus *P.* (*Poecilozonites*), for example, the correlation of shell thickness with available CaCO_3 is pervasive, but the effect is almost surely phenotypic in some cases (thick shells on limestone